Remarks

The Office Action and the references cited therein have been carefully reviewed. The following remarks herein are considered to be responsive thereto. Claims 1-15 remain in this application.

The Examiner rejected Claims 1-15 under 35 U.S.C. §103a) as being unpatentable over US Patent No. 6,611,249 issued to Evanicky, et al. (Evanicky) in view of US Patent No. 5,956,006 issued to Sato (Sato). Applicants respectfully traverse the Examiner's rejections for at least the reasons set forth below.

The patent to Evanicky discloses a system and method for controlling the white balance and providing gamma correction within a flat panel liquid crystal display (LCD). Electronic circuitry is included in the flat panel LCD for coupling the LCD to a host computer in order to receive a white-balance adjustment control signal from the host computer. Further, the LCD can be coupled to a light-sensing device in order to detect the optical characteristics of the LCD.

The patent to Sato discloses an electrically controlled birefringence type LCD apparatus that is capable of presenting display colors specified by red, green and blue luminance data. Sato discloses that a CPU produces image data of RGB for defining a display image, wherein the image data written into a memory. A conversion table converts image data to voltage data corresponding to a voltage for displaying a color close to a color defined by the image data. The voltage data is converted to an analog voltage that is in turn applied to the ECB type liquid crystal display device.

The present invention is generally directed to setting a color temperature of a white point, e.g., at a highest gray level, in an LCD display device, and making an

adjustment so as to maintain a color temperature substantially constant at each gray level. In particular, the present invention is directed to a white point adjustment methodology and apparatus for adjusting white color coordinates at any gray level of white precisely on the CIE (chromaticity diagram).

In regard to claims 1, 5, 8 and 12, the Examiner states that Evanicky comprises "a first step of setting a white point by deciding an offset quantity of at least one color signal from a highest gray level for each color temperature (step 940 of figure 15 and col. 17, lines 53-63). Further, the Examiner states Evanicky comprises "a second step of setting an offset quantity of the color signal in a direction of converging a halftone white point for each color temperature set in the first step (steps 950 and 960 of figure 15 and col. 17, line 64 through col. 18, line 13). Applicant respectfully disagrees with the Examiner's assessment due to the fact that Evanicky fails to expressly teach how the offset value for each RGB primary input data is determined.

Further distinguishing the presently claimed invention from Evanicky, the present invention clearly teaches that a mode of calculation can be performed with accuracy of bits larger in number than those of the input video data. This practice results in the avoidance of bits being dropped due to offset adjustment of the gamma curve, thus resulting in a, highly accurate convergence of a white point.

The Examiner cites the art of Sato as teaching "a liquid crystal display apparatus, wherein an offset value is added to the offset quantity of at least one of the color (col. 11, lines 3-57)." Sato, as mentioned above, is directed to an electrically controlled birefringence (ECB) type LC. The ECB does not comprise sub-pixels of RGB on the LC display; rather a voltage is applied onto a pixel of LC to realize a certain color. Sato

teaches that color data from a PC system that consists of an RGB combination is converted to one voltage level to enable one pixel of the LCD to display a desired color. A desired color will be approximated by the color of the nearest color coordinates on CIE, however, the color cannot be completely the same color though.

Thus, the methodology described in Sato cannot achieve the graduation of a color, for example, black to white with smooth gray scale, black to green with smooth green gray scale, etc. as disclosed in the present invention. Thus, Sato does not cure the deficiencies of Endo because the methodology disclosed by Sato cannot adjust white coordinates freely, much less precisely. That is, Sato cannot move the color coordinates of white out of color locus of birefringence type LC on CIE.

The Federal Circuit has dealt with what is required to show a motivation to combine references under 35 U.S.C. § 103(a):

> [R]ather then pointing to specific information in Holiday or Shapiro that suggest the combination..., the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other-in combination with each other... described all of the limitations of the pending claims. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the ... references, nor does the Board make specific-or even inferential-findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any factual findings that might serve to support a proper obviousness analysis.

In re Dembiczak, 50 USPQ2d 1614, 1618 (Fed. Cir., April 28, 1999) (citations omitted).

Thus, from *In re Dembiczak* it is clear that the Federal Circuit requires a specific identification of a suggestion, motivation, or teaching why one of ordinary skill in the art

would have been motivated to select the references and combine them. In this instance the Examiner has not done this.

Thus, Applicants respectfully submit that the Examiner has used impermissible hindsight by citing the combination of the disclosures of Evanicky and Sato to reject claims 1-15 under 35 U.S.C. 103(a). To prevent the use of hindsight based on the invention to defeat patentability of the invention, the Examiner is required to show a motivation to combine the references that create the case of obviousness. Applicants respectfully submit that the Examiner has not met this burden.

In light of the Examiner's lack of specificity with regard to the motivation to combine the cited references, the applicant respectfully submits that the rejections for obviousness of claims 1-15 under 35 U.S.C. 103(a) lack the requisite motivation and must be withdrawn.

In view of the above, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

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